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DIVISION OF CONSUMER AND TRANSPORTATION PROGRAMS**

**Summary of Comments and Response to Comments  
on the Proposed Amendments to the Regulation and  
State Implementation Plan for Ozone; and**

**Findings under the Massachusetts  
Low Emission Vehicle Statute, M.G.L. c. 111, Section 142K.**

**310 CMR 7.40:**

**The Massachusetts  
LOW EMISSION VEHICLE PROGRAM**

**Regulatory Authority: M.G.L. c. 111, Sections 142A through 142M**

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## **I. SUMMARY OF AND RESPONSE TO COMMENTS ON 310 CMR 7.40: THE LOW EMISSION VEHICLE PROGRAM REGULATION**

Comments were received from the following organizations. The number(s) following each comment refer to a commenter as listed below:

- (1) Large Volume Manufacturers, to include Daimler Chrysler, Ford, General Motors, Honda, Nissan, Toyota, and Volkswagen (submitted by Kelly Brown, Director of Vehicle environmental Engineering, Ford Motor Company)
- (2) Ford Motor Company, Kelly Brown, Director of Vehicle Environmental Engineering
- (3) General Motors, Alan R. Weverstad, Executive Director, Mobile Emissions and Fuel Efficiency
- (4) Nissan North America, Harland Reid, Senior Director, Government Affairs

The Massachusetts Department of Environmental Protection (the “Department”) proposed amendments to 310 CMR 7.40, the Low Emission Vehicle (LEV) Program regulations, and, in accordance with the public review process requirements of M.G.L. Chapter 30A, made the proposed amendments available for public review, published notification of the amendments, and held a public hearing in order to solicit public comment on the regulation. The Public comment period ended July 31, 2005 and relevant comments have been summarized and organized into the following groupings:

- A. General Comments
- B. Equal Treatment of Type III ZEVs
- C. Fuel Cell Path Obligation
- D. Percentage Requirements in the ACP
- E. Early Excess Credits as AT PZEVs
- F. Infrastructure and Transportation Credit Calculation
- G. Timing of ZEV Compliance Reporting
- H. Clerical Corrections

### **A. General Comments**

**Comment:** Three commenters ((1)(2)(3)) reiterated their opposition to adoption of the Zero Emission Vehicle (ZEV) mandate in Massachusetts. All four of the commenters stated that they support the optional Alternative Compliance Plan (ACP) and appreciate the flexibility it provides in complying with the ZEV mandate, as well as the Department’s willingness to work with the manufacturers and the other adopting states in developing the ACP. (1)(2)(3)(4)

**Response:** The Department recognizes the industry’s opposition to the ZEV mandate but stands behind its decision to adopt the ZEV requirements, as required by Massachusetts state law. Further, the Department appreciates the support of the manufacturers with

respect to the ACP and will continue to work closely with the manufacturers and the other LEV states.

## **B. Equal Treatment of Type III ZEVs**

**Comment:** Sections 7.40(15)a.2. and 7.40(15)b. exclude type III ZEVs placed in service by manufacturers who have chosen to follow California’s “fuel cell path” from receiving the Massachusetts multiplier, whereas type III ZEVs placed in service by manufacturers following California’s “base path” are eligible to receive the multiplier. The Massachusetts multiplier should be applied consistently, regardless of the compliance path chosen by the manufacturer. (1)

**Response:** The Department does not agree with this comment. Type III ZEVs placed in service in conformance with the California “fuel cell path” generate substantial credit following the crediting scheme prescribed in California Code of Regulations (CCR), Title 13, section 1962. This substantial credit is applicable in Massachusetts, making it unnecessary to apply the Massachusetts ACP multiplier.

Alternatively, type III ZEVs placed in service in Massachusetts by manufacturers pursuing the California “base path” are eligible for the Massachusetts multiplier in order to provide an incentive for manufacturers to place such vehicles in the Commonwealth.

The Massachusetts ACP requirements are consistent with New York’s and Vermont’s Alternative Compliance Plans.

## **C. Fuel Cell Path Obligation**

**Comment:** The proposed ACP recognizes the CCR, Title 13, section 1962(b)(2)(B) optional Alternative Requirements (fuel cell path) but clarification is needed regarding the appropriate method to use in determining the minimum floor for production of type III ZEVs, with respect to Massachusetts. (1)

**Response:** In determining what a manufacturers’ alternative path percentage should be, the Department will require that the manufacturers utilize the same percentage as that calculated in accordance with CCR, Title 13, section 1962(b)(2)(B)1.e. for California. Credits earned from the placement of type III ZEVs can be utilized in all of the LEV/ZEV states, in accordance with CCR, Title 13, section 1962(d)(5)(D).

## **D. Percentage Requirements in the ACP**

**Comment:** Manufacturers electing to follow the California fuel cell path should be able to use any combination of Advanced Technology Partial ZEVs (AT PZEVs), ZEVs, or

credits generated from such vehicles to satisfy the phase in requirements specified in Table 310 CMR 7.40(15)(c)1. (1)(4)

The comment from the Large Volume Manufacturers (1) recommended the following language be added to Section 7.40(15)(c):

except that if such manufacturer opts into California's alternative requirements for large volume manufacturers as provided in California Code of Regulations, Title 13, section 1962(b)(2)(B), model year 2007 and 2008 minimum ZEV percentage requirements may be met in the manner identified in California Code of Regulations, title 13, section 1962(b)(2)(B)2.

**Response:** The Department agrees with these comments and will modify the language in the final regulation as recommended. For those manufacturers opting into California's alternative path, CCR Title 13, section 1962(b)(2)(B)2. requires that for MYs 2007 and 2008, 40% of the ZEV obligation must be met with ZEVs, AT PZEVs, or credits generated from such vehicles. The remainder may be met using Partial ZEVs (PZEVs) or credits generated from such vehicles. Further, the additional language will bring the Massachusetts ACP requirements fully in line with both the New York and Vermont Alternative Compliance Plans, thus maintaining regional consistency.

#### **E. Early Excess Credits as AT PZEVs**

**Comment:** Two of the comments received addressed the need to allow the Massachusetts multipliers (Table 310 CMR 7.40(15)(c)1) to be applied to early and excess PZEV credits. Some manufacturers may have placed PZEVs in Massachusetts in order to generate excess credits which could be used as AT PZEV credits, with the understanding that the Massachusetts multiplier could be applied. Not allowing the application of the multiplier to such credits is inconsistent with the earlier ACP intent and may retroactively remove credits earned under prior agreements. (1)(4)

**Response:** In June 2004, DEP released a Response to Comments document in which the ACP provisions were removed in response to numerous comments. DEP committed to "initiate discussions with the automobile manufacturers and Section 177 states on the ACP." The Response to Comments document went on to state, "Following these discussions, the Department may amend 310 CMR 7.40 to adopt a revised ACP." Therefore, changes to the ACP were to be expected. Once the ACP was removed from the regulations in June 2004, any ACP approvals issued prior to that time were no longer effective going forward. As specified in 310 CMR 7.40(15)(a)1., the process for establishing a new ACP approval requires submittal of a plan for Department approval within 60 days after the effective date of this amendment.

The Department does not agree that the ACP, as written, is inconsistent with the earlier ACP intent, which is to provide compliance flexibility to the manufacturers, while also promoting the placement of advanced technology vehicles in the Commonwealth. To

that end, the ACP language, as proposed, further promotes the placement in Massachusetts of not just PZEVs, but also a greater number of AT PZEVs.

The Massachusetts ACP requirements are consistent with New York's and Vermont's Alternative Compliance Plans with respect to the treatment of Type III ZEVs.

## **F. Infrastructure and Transportation Credit Calculation**

**Comment:** Due to the cost and complexity of establishing an innovative transportation system under 310 CMR 7.40(15)(e), the proposed ACP should be modified such that advanced technology vehicles placed in Massachusetts as part of such a project are eligible to receive the additional phase-in multiplier. The commenter also stated that the "credits provided for each transportation project should be reviewed on a case-by-case basis." Further, the model year (MY) 2008 sunset provision should be eliminated in order that the Massachusetts requirements for Infrastructure and Transportation projects follow the sunset provisions (MY 2011) specified in CCR, Title 13, 1962(g)(5)(A). (1)

**Response:** The Department does not agree that further incentives, such as application of the phase-in multiplier, are necessary, or that the model year sunset provision should be eliminated.

As proposed in 310 CMR 7.40(15)(e)(2), the maximum credit allowed for infrastructure and transportation system projects is twenty-five percent (25%) of a manufacturer's total ZEV percentage requirement, which is significantly higher than the effective maximum of 17% allowed under CCR, Title 13, 1962(g)(5)(C). The ACP as proposed also includes language which provides for the evaluation and credit determination of these types of projects on a case-by-case basis by the Department. Due to the ability of the manufacturer to meet a higher percentage of its ZEV obligation with these types of credits (with the number of credits awarded only after each proposed transportation and infrastructure project is evaluated by the Department) application of additional credits through the phase in multiplier is not necessary.

The MY 2008 transportation and infrastructure project sunset provision simply corresponds with the end of the Massachusetts ACP. If a manufacturer proposed extending a project into the period between MY 2008 and MY 2011 (the sunset date specified in CCR, Title 13, 1962(g)(5)(A)), the Department would evaluate such project according to the provisions in California's ZEV regulations, which Massachusetts has previously adopted.

## **G. Timing of ZEV Compliance Reporting**

**Comment:** The deadline for submitting ACP compliance reports should be changed from March 31<sup>st</sup> to May 1<sup>st</sup> in order to coincide with the California ZEV compliance reporting requirements. (1)

**Response:** The Department does not agree with this comment because the reporting requirements in 310 CMR 7.40(15)(f)(2) include the following language: “the potential to amend, based on late sales,” thus providing the manufacturers the ability to modify their reports if necessary. The Massachusetts ACP reporting requirements are also consistent with the ACP reporting requirements specified in the New York and Vermont plans. (1)

## **H. Clerical Corrections**

**Comment:** A number of minor administrative corrections were recommended in the comments submitted by commenter number 1. (1)

**Response:** The Department agrees with all but one of the recommended corrections and has included the corrections in the final ACP regulatory language. The one correction not agreed to by the Department recommended replacing “California” with “Massachusetts” in 310 CMR 7.40’s citation of CCR, Title 13, 1962(g)(8), which addresses California-specific penalties for not meeting the ZEV requirement. Massachusetts relies on its own authority with regard to enforcement of its regulations and therefore has never adopted CCR, Title 13, 1962(g)(8), making the recommended changes irrelevant.

## **II. FINDINGS UNDER THE MASSACHUSETTS LOW EMISSION VEHICLE STATUTE**

### **Statutory Requirement, M.G.L. c. 111, Section 142 K (a)**

The Massachusetts Low Emission Vehicle statute provides in relevant part:

“...the Department of Environmental Protection, hereinafter referred to as the department, shall adopt motor vehicle emissions standards based on the California’s duly promulgated motor vehicle emissions standards of the state of California unless, after a public hearing, the department establishes, based on substantial evidence, that said emissions standards and a compliance program similar to the state of California’s will not achieve, in the aggregate, greater motor vehicle pollution reductions than the federal standards and compliance program for any such model year. The department shall publish issue detailed written findings before and after holding a public hearing pursuant to this paragraph and said hearing shall be subject to the provisions for public hearings contained in chapter thirty A. ...”

### **Technical Analysis and Findings**

In accordance with M.G.L. c. 111, Section 142K, the Department assessed the air quality impacts of adopting the California LEV II standards, including the modifications to the

ZEV mandate, as compared to the impacts of having federal standards in place in Massachusetts. This assessment was part of the Department's rulemaking process in 1999. The Department engaged the services of Cambridge Systematics, Inc. through a contract with Northeast States for Coordinated Air Use Management (NESCAUM) to perform a technical analysis prior to the adoption of the standards. The results of this analysis showed that the adoption of the LEV II standards, including the ZEV mandate, in the aggregate would result in the lowest level of on-road motor vehicle emissions in Massachusetts for Non-Methane Hydrocarbons (NMHC), Nitrogen Oxides (NO<sub>x</sub>), Carbon Monoxide (CO), and air toxics. The technical analysis is available through the Department.

Adoption of the proposed voluntary ACP will not affect the air quality benefits predicted by the aforementioned assessment but will only modify the ZEV compliance scheme to enhance the effectiveness of the ZEV mandate. This will promote the early introduction of advanced technology vehicles in the state, which, will further enable the state to meet its ozone attainment goals.

Therefore, based upon the Department's technical analysis as set forth in the Department's Background Document and Technical Support to the proposed amendments, the Department finds that the California's Low Emission Vehicle program, including the optional Massachusetts ACP, provides Massachusetts with greater motor vehicle pollution benefits than the current federal motor vehicle emission control program.